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IAA/IISL SCIENTIFIC-LEGAL ROUNDTABLE "SPACE TRAFFIC MANAGEMENT"

Chairpersons: Kai-Uwe Schrogl (Germany) and Petr Lala (Czech Republic)
Rapporteur: Corinne Contant-Jorgenson (United States)

Following a break of three years, the IAA/IISL Scientific-Legal Roundtables were re-established based on an initiative by Prof. Vladimir Kopal. The topics are prepared by the IAA/IISL Scientific-Legal Liaison Committee. The Roundtables will take place annually and be composed of a few invited papers, a panel discussion and a discussion open to the audience.

This first Roundtable of the new series dealt with the topic of Space Traffic Management (STM). This topic has been covered during the past two years by IAC technical sessions, which were feeding an ongoing IAA study on this subject. The presentation of the final results of this study – which will be published in early 2006 (also accessible through the IAA webpage) - was the basis for this Roundtable. All speakers had been involved in the study and during the session they highlighted various specific aspects before the comprehensive study results were presented.

There is already a great deal of space traffic. It seems, however, minuscule with regard to the dimension of near-Earth outer space. Around 9.000 man-made objects larger than about 10 cm are currently catalogued, out of which only 650 are operational spacecraft. At first glance, the management of space traffic does not appear to be a pressing problem. On closer examination, this judgement has to be challenged. A high level and ever growing number of launches from more and more launch sites and spaceports, the participation of non-governmental entities, the positioning of satellite constellations, an increase in space debris and the advent of reusable launch vehicles support this view. Considering this scenario, conceptualizing STM will turn out to become a relevant task during the next two decades. STM, however, will limit the freedom of use of outer space. Therefore an international consensus on internationally binding regulations will only be achieved, if States identify certain urgency and expect a specific as well as collective benefit – including an economic benefit - from this. The IAA study does not provide a specific plan of action to any single target user. In sketching out first steps, however, it addresses or directs decision makers in UNCOPUOS, ITU and ICAO to approach specific problems, which might then become building blocks for a future comprehensive STM regime.

Speakers:

Topic:

William Ailor (United States) Lubos Perek (Czech Republic) Peter van Fenema (Netherlands) Contant/Lala/Schrogl Technical basics and prospects for the use of outer space Space traffic management – what is possible? Air and space traffic management compared Status of the IAA study on space traffic management